## STAFF REPORT

## CEASE AND DESIST ORDER FOR COUNTY OF SHASTA REDDING REGIONAL SEPTAGE DISPOSAL FACILITY SHASTA COUNTY

The County of Shasta (hereafter, Discharger) operates the Redding Regional Septage Disposal Facility located approximately 3.5 miles west of the City of Anderson.

The Facility was constructed in 1976 and consists of 10 unlined ponds in series that cover a surface area of approximately 11.5 acres with a total capacity of 16.2 million gallons. Incoming septage enters the pond chain at the primary pond, where solids are allowed to settle out, and the liquid portion is decanted into the next pond in series, where it is allowed to either evaporate or percolate into the subsurface. The Facility has been regulated under Waste Discharge Requirements Order No. 94-018 since 1994.

Historical data from monitoring wells indicates that the discharge has not impacted groundwater. The risk of future impacts to groundwater is minimal due to the nature of the underlying soil conditions and depth to groundwater. Regional groundwater is approximately 300 feet below ground surface and the permeability of the underlying native materials was found to be  $1.9 \times 10^{-3}$  cm/sec to  $3.3 \times 10^{-3}$  cm/sec in the upper silty/gravel and  $4.7 \times 10^{-6}$  cm/sec to  $8.5 \times 10^{-6}$  cm/sec in the interbedded clay soils, which are at least 10 feet in thickness.

On 8 April 2005, staff of the California Regional Water Quality Control Board, Central Valley Region (Regional Water Board) reviewed and approved a report titled, 20-year Capacity Study and Proposed Expansion of the Redding Regional Septage Ponds, dated 29 March 2005. According to the Executive Summary in the report, "The 20-Year Capacity Study for the Redding Regional Septage Impoundments revealed that septage intake is growing at the rate of approximately 300,000 gallons per year and that the ponds are near maximum capacity. Even normal septage intake and average rainfall may result in overcapacity of the facility within the next couple of years." In order to remain operable and still contain precipitation from a 100-year wet season event. Shasta County concluded that the facility immediately needed to add an additional 13.5 million gallons of storage capacity. In 2005, the Facility received an average of 550,000 gallons per month. The Facility was originally designed for a flow rate of 9,000 gallons per day (gpd, which equates to approximately 270,000 gallons/month) and when operation began in 1977 the Facility received about 5,000 gpd.

The Discharger violated Order No. 94-018 in March and April 2006. On 13 March 2006, Shasta County Department of Public Works notified Regional Water Board staff that wastewater was overtopping in Pond E-5, the final pond in series. Regional Water Board staff inspected the Facility during the week of 13 March 2006 and 12 April 2006, and observed wastewater overtopping Ponds E-4 and E-5. Samples collected from Ponds E-4 and E-5 were analyzed for total and fecal coliform, chloride, and nitrate. The samples contained concentrations of chloride above water quality objectives for agricultural use. Regional Water Board staff issued Shasta County Department of Public works a Notice of Violation for discharging wastewater from Ponds E-4 and E-5 and not maintaining the required freeboard.

On 15 March 2006, Shasta County began to utilize water trucks to remove liquid from Pond E-1 in an effort to stop wastewater from overtopping Ponds E-4 and E-5 and eventually attain adequate freeboard. In an 8 May 2006 staff enforcement letter, the Regional Water Board Executive Officer requested a technical report pursuant to Section 13267 of the California Water Code describing plans and a time schedule for facility expansion. Shasta County submitted the report, dated 29 June 2006, describing proposed operating procedures to prevent further discharges from the ponds. Shasta County has completely dried-out and cleaned ponds E-4 and E-5 prior to the onset of wet weather in 2006/2007. Rainwater from the clean ponds will be discharged until the ponds are needed to contain septage. Shasta County plans to proceed with a proposed expansion in 2007 or 2008. The Cease and Desist Order provides a time schedule for submittal of technical reports to the Regional Water Board and construction of the septage pond expansion project. The Waste Discharge Requirements will be revised prior to completion of the expansion project to reflect proposed changes and possible waste load increases.

## SUMMARY AND RECOMMENDATION

Staff recommends adoption of the Cease and Desist Order as proposed.